Outreach Participation by UNH Faculty Researchers in Project SMART
July 5 – 28, 2006

Project SMART is a summer institute that challenges, educates, and motivates talented high school students in science and math. It exposes the students to advanced topics in selected areas of science in an interdisciplinary way through lectures, field trips, and hands-on laboratory experience, where they learn the process of research with UNH faculty and graduate students. This summer, Project SMART’s 16th year, members of the Center for High-rate Nanomanufacturing participated in a Biotechnology and Nanotechnology unit as part of the Project SMART program.

Susan Greenberg and Glen Miller organized members of the Center for High-rate Nanomanufacturing so that their presentations took place over the course of the four week program (see list of presenters and program schedule below). The Biotechnology and Nanotechnology Unit had twenty-two students participating—the largest number of students participating in any of the three units given this summer.
Project SMART 2006:
Schedule of Nanotechnology Talks, Demonstrations and Activities

Thursday, July 6
1:15 - 2:45 PM   Nanotechnology Primer I: What is nanotechnology? How will it impact my life? (Professor Glen Miller)
3:00 – 4:30 PM   Nanotechnology Primer II: Molecular Assemblers- Fascinating Fact or Science Fiction? (Professor Glen Miller)

Friday, July 7
1:15 - 2:45 PM   Nanotechnology Primer III: How Can We See Things So Small? (Professor Glen Miller)
3:00 – 4:30 PM   Atomic Force Microscopy Demonstration (Jun-Fu Liu)

Monday, July 10
1:15 - 4:30 PM   An Unusual Nanomaterial: Demonstration and Laboratory Tour (Professor Brad Kinsey)

Wednesday, July 12
1:15 - 2:45 PM   Nanotechnology: A Theoretician’s Perspective (Professor Howard Mayne)
3:00 – 4:30 PM   Self-Assembling Nanostructures Exercise (Professor Howard Mayne and Gregory Bubnis)

Thursday, July 13
1:15 - 2:45 PM   Computational Nanotechnology- a.k.a. Molecular Modeling (Professor Richard Johnson)
3:00 - 4:30 PM   Molecular Modeling Exercise: How Small are Molecules? How Big is Nano? (Professor Richard Johnson)

Friday, July 14
1:15 - 2:45 PM   The Physics of Nanotechnology, (Professor Karsten Pohl)
3:00 – 4:30 PM   Nanotechnology Laboratory Tour (Professor Karsten Pohl)

Monday, July 24
10:20 – 12:00   “Early (Pre-Nano) Nanochemistry” (Professor Arthur Greenberg)
1:15 – 4:30pm   Nano-Nickel Laboratory (Professor Arthur Greenberg & Tim Henderson)

For more information about nanotechnology outreach activities at UNH, contact Sue Greenberg at sjg3@cisunix.unh.edu.